PPPL Institutional Issues

R. J. Hawryluk

Office of Fusion Energy Sciences
Budget and Planning Meeting
March 13-14, 2007

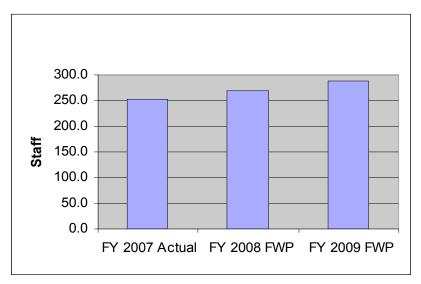


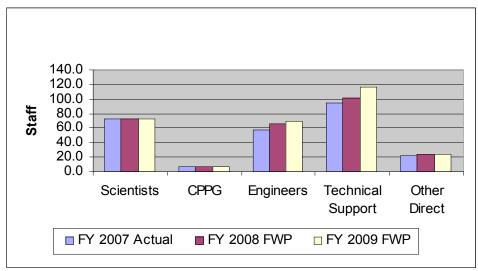
Budget Requirements to Support OFES Programs

Project	FY 2007 Jan AFP*	FY 2008		FY 2009	
		Base	Inc.	Base	Inc.
NSTX	29.2	30.6	3.6	31.2	3.9
NCSX	15.0	15.4	2.4	18.3	2.4
QPS / ARIES	0.4	0.4	2.4	0.4	2.4
DIII-D / C-MOD Coll.	6.1	6.5	1.1	6.6	1.3
International Col.	2.2	2.4	1.0	2.5	1.7
ITER (excl. flow thru M&S)	3.9	6.5		7.3	
PS&T	4.1	4.3	1.0	4.3	2.3
Heavy Ion Beams	1.0	1.0	0.6	1.0	0.6
Diagnostic Development	0.5	0.5	-	0.5	-
Theory / SciDAC	7.0	7.0	1.0	7.2	1.1
Science Education	0.5	0.7	0.1	0.8	0.
General Plant Projects	1.8	1.9	0.4	1.9	0.6
All Other	0.6	1.0		1.0	
Total OFES (dollars in millions)	72.3	78.2	13.6	83.0	16.4



Direct Staffing Covered by OFES Funding Plan





 Increase in technical support is accomplished by term labor to support NCSX construction and startup.



Broader S&T Outreach

	Mar. 06 to Mar. 07
Presentations at Colleges and Universities to Non-plasma Majority Scientific Audiences	5 1
Collaborations with Institutions Outside of Plasma Physics	28
Invited Talks at Non-plasma Specific Meetings	22
Publications in Broader Science Journal	114
Leadership Positions	42



PPPL is Actively Supporting ITER

ITER Design Review Working Group Participation

Buildings - C. Neumeyer, H&CD - J. Hosea, L. Grisham

Design Req's - R. Hawryluk In-vessel Comp's - C. Skinner, D. Johnson

Several other researchers and engineers are presently addressing tasks related to the Design Review.

Burning Plasma Organization

Council Vice Chair - M Zarnstorff
Broad research participation including TG leaders/deputies
J. Menard, C. Phillips, R. Nazikian, D. Gates, C. Kessel

ITER Project Responsibilities

WBS Responsibility - Steady State Electric Power - C. Neumeyer,
Diagnostics - D. Johnson

Engineering - TF conductor R&D, Design support for CS ICH transmission line R&D support



Impact of a 10% Reduction in '09 Relative to the Base Case

Staffing Impact

The "10% reduction in '09" would result in a loss of ~35 scientists, engineers, technicians and administrators relative to present staff.

Programmatic Impact (if ~35 staff were reduced)

- NSTX operation decreased from 12 to 6 weeks, upgrades drastically cut back.
 - Delay high power ECH by one year.
- Delay in NCSX upgrades jeopardizes FY'11 run schedule.
- Loss of staff with unique skills will have a profound impact of being able to execute and support the diversity of programs.
- Unable to meet Office of Science expectations on facility maintenance initiatives and GPP.
- Increased risk in meeting environmental, financial and other regulatory requirements.

Summary

- PPPL participates in, and supports, the broad portfolio of research activities in OFES.
 - Strong elements of our program are:
 - collaboration on PPPL facilities and
 - collaboration on other facilities around the nation and the world.
 - Inter-institutional collaborations prepare us for ITER and beyond.
- All large facilities, including NSTX and NCSX, would make a greater impact with more run time and upgrades.
- ITER is a major scientific opportunity for the entire Fusion Energy Science community
 - PPPL looks forward to continuing to contribute to ITER in collaboration with the community.